Amendments to the Specification:

Please amend the specification as follows:

Please amend the paragraph bridging pages 4 and 5 as follows:

In summary, the process according to the present invention utilizes plasma [[grow]] glow discharge and comprises a known microwave plasma CVS process to which a magnetic field is added to utilize the interaction of the magnetic field with the high frequency (micro wave) electric field. However, the ECR conditions are omitted from the process. The process according to the present invention conducts the film deposition in a hybridized resonance space using a high density plasma having a high energy, under a high pressure in the range of from 0.03 to 30 Torr. In the process according to the present invention, the plasma excitation is carried out with a pulsed wave or a combination of a pulsed wave and a stationary continuous wave, as set forth above, under a high energy state in the hybridized resonance space to thereby generate active species at an increased amount and also to effect homogeneous nuclei formation on the surface of the substrate. This enables the formation of a thin film material at an excellent reproducibility.

Please amend the paragraph bridging pages 5 and 6 as follows:

In the deposition of a DLC film, for example, a pulsed wave having relationship between time and power (effective value of power) as shown in FIG. 4 can be applied. Preferably, the bonding within the DLC film is in sp^3 hybridization. The ratio of the dissociation energy for sp^3 hybridization to that for sp^2 hybridization is 6 : 5. In FIG. 4, it can be seen that the first peak 30 is 6/5 times as high as the second peak 31. In this case, the energy for the first peak 30 is preferably smaller than the dissociation energy of sp^3 hybridization but maintained higher than the dissociation energy of sp^2 hybridization, so as not to break the sp^3 hybridization bonding but to promote breakage of sp^2 hybridization bonding. More specifically, for example, the energy of the first peak is set in the range of from 5 to 50 KW, and that of the second peak is set in the range of from 4.1 to 46 KW. Furthermore, in a pulsed high frequency plasma CVD, the nucleus formation is activated while the growth of the formed nuclei is suppressed. Such a phenomena results in a uniform formation of crystal nuclei over the substrate, which is followed by a growth into a DLC film

composed of columnar crystals 29, said crystals being substantially one-direction oriented toward the upper direction, such as shown in Figure 5. Thus, a DLC film having a uniform crystal structure and dominant in sp^3 hybridization can be deposited at a high reproducibility, free from problems frequently encountered in conventional processes, such as the stress due to tapered film growth and the peeling off of the deposited film induced therefrom. The pulsed wave power may be acicular pulse power, as well as the powers shown in FIGS. 6(A) and 6(B).

Please amend the paragraph bridging pages 7 and 8 as follows:

Referring first to FIG. 1, a microwave plasma CVD apparatus according to the present invention, to which a magnetic field is applicable is shown. The apparatus comprises a plasma generating space 1, a supplementary space 2, Helmholtz coils 5 and 5' for generating the magnetic field, a power source 25 to supply energy to the Helmholtz coils, a generator 4 for generating pulsed microwaves (also for generating waves obtained by superimposing a pulsed wave upon a stationary continuous wave), a turbo molecular pump 8 which constitutes an evacuation system, a rotary pump 14, a pressure control valve 11, pressure valves 12 and 13, a substrate holder 10', an article 10 on which a film is deposited, a microwave entrance window 15, a gas system 6 and 7, a water cooling system 18 and 18', a halogen lamp 20 powered by power source 23, a reflector 21, lens 22 for focusing photo energy beam 24, and a heating space 3.

On page 9, please amend the second full paragaraph to read as follows:

The magnetic field as shown in FIG. 1 is generated by a Helmholtz coil system using two ring-shaped coils 5 and 4'. A quarter of the electric field and that of the magnetic field are shown in FIGS. 2(A) and 2(B). Referring to FIG. 2(A), the abscissa (X-axis) represents the horizontal direction (the direction in which the reactive gas is discharged) of the space [[30]] 38, and the ordinate (R-axis) represents the direction along the diameter of the Helmholtz coil. The curves drawn in FIG. 2(A) represent the equipotential plane of the magnetic field. The numerals placed on the curves indicate the intensity of the magnetic field obtained when the magnetic intensity of the Helmholtz coil 5 is about 2000 Gauss. The magnetic field intensity over a large film-deposition area of the substrate in a region 100 in

which the interaction between the electric field and the magnetic field occurs can be controlled to a nearly constant valve (875 Gauss + 185 Gauss) by adjusting the strength of the magnet 5, that is by adjusting current flowing through the Helmholtz coil 5. FIG. 2(A) shows the equipotential planes in a magnetic field; in particular, curve 26 is the equipotential plane in the magnetic field for 875 Gauss, which corresponds to the ECR condition.